Caffeine Consumption and Oral Health Perceptions Among Kuwait University's Health Sciences Center (HSC) Students

CASE WESTERN RESERVE UNIVERSITY
School of Medicine

Master of Public Health Program

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➢ Background

Stressful academic settings may lead students to consume caffeine to stay alert, and sugary or acidic beverages may affect oral health. **This study examines the relationship between stress, caffeine consumption, and oral health behaviors among Kuwait's HSC students.**

➢ Population

Current 3222 students in all **5 colleges** of HSC.

➢ Learning Objectives

1) **Prevalence** and patterns of caffeine consumption among Kuwait University HSC students.
2) **Potential association** between caffeine consumption and oral health behaviors.
3) **Students' perceptions** of caffeine/sugar's oral health impact and compare them by gender and college.

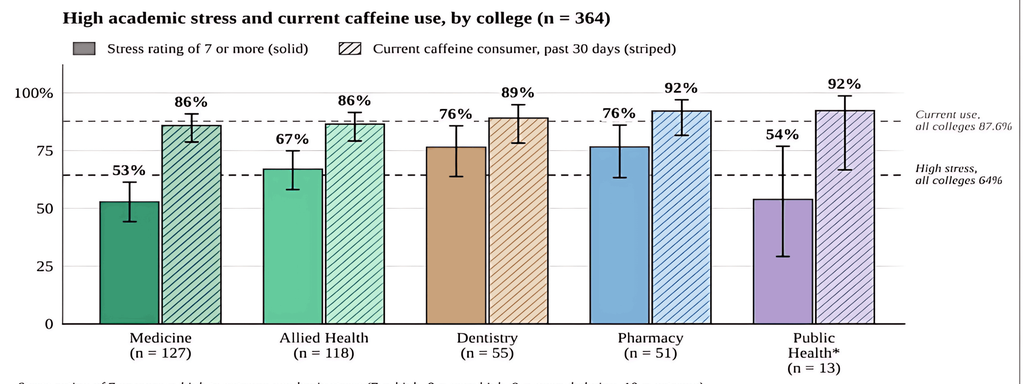
➢ Activities

1. **Questionnaire Development:** Items tailored to the target population and objectives. **(via QR)**.
2. **Validation & Lit. Review:** Relevant to published peer-reviewed studies. Then, 2 CWRU faculty experts in health behavior and community dentistry approve it.
3. **Data Collection and Analysis:** Responses were collected online via **Qualtrics** and analyzed using appropriate statistical methods.



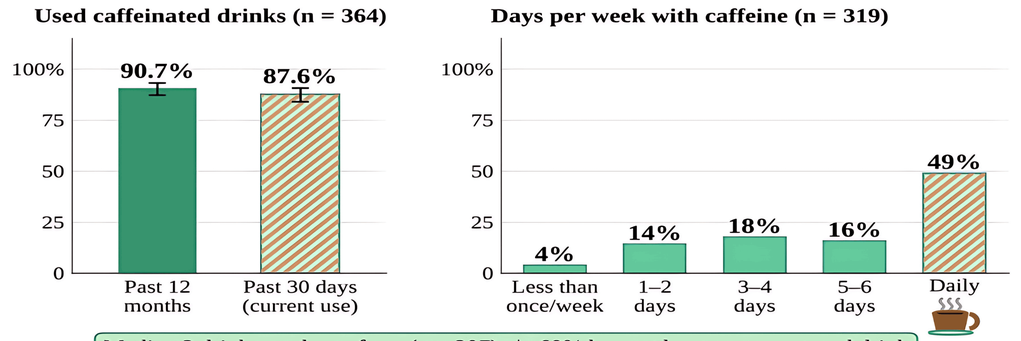
➢ Deliverables

High Academic Stress and Caffeine Consumption



Stress rating of 7 or more = high to extreme academic stress (7 = high, 8 = very high, 9 = overwhelming, 10 = extreme).
Current caffeine consumer = consumed caffeinated drinks during the past 30 days.

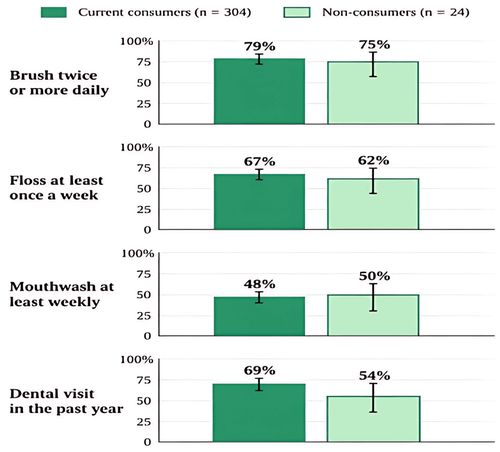
Objective 1: Prevalence and Pattern of Caffeine Consumption



Median 2 drinks on days of use (n = 307) | 69% have at least one sweetened drink

Past 30 days = current use. Past 12 months includes people who stopped in the last month. Error bars = 95% CI.
Drinks per day: asked of current consumers who use caffeine at least 1–2 days a week (n = 307 of 319).

Objective 2: Caffeine and Oral Health Behaviors



No statistically significant differences (all p ≥ 0.17)

Percent reporting each behavior. Error bars = 95% CI. Fisher's exact test.
Few non-consumers, so small differences cannot be ruled out.

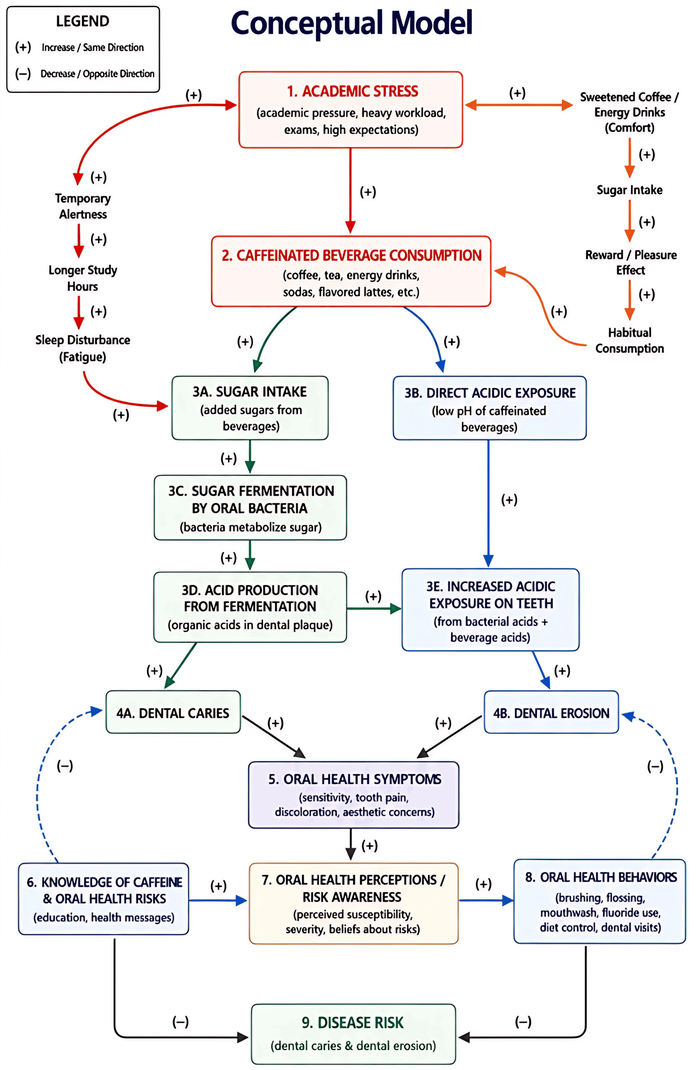
Objective 3: Perceived Impact on Oral Health

Statement (% who agree)	All	Male	Female	Difference by gender
Acidic drinks can damage teeth	90%	82%	92%	**Yes ($p = 0.008$)**
Sweetened drinks raise my risk of tooth decay	88%	75%	91%	**Yes ($p = 0.048$)**
My teeth feel more sensitive after frequent intake	30%	29%	30%	No
I should reduce or modify my intake	66%	56%	69%	No ($p = 0.086$)
I would change my intake if given clear caffeine/sugar charts	63%	65%	62%	No
By college	No significant differences on any statement			

Agree = agree or strongly agree. n = 333–335 per statement (male 68, female about 265).

Mann–Whitney U (gender) and Kruskal–Wallis (college); p-values adjusted for multiple tests (Holm).

Conceptual Model



➢ Public Health Implications

- ❑ **Baseline evidence** on caffeine and oral health health among students in stressful academic environments.
- ❑ Guiding targeted university wellness initiative **against caries and erosion.**

➢ Acknowledgments

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